MATERIAL SAFETY DATA SHEET

DATE PREPARED: 08/08/2001

MSDS No: 7121

ORTHO® Bug-B-Gon® Multi-Purpose Insect Killer Ready-To-Use

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ORTHO® Bug-B-Gon® Multi-Purpose Insect Killer Ready-To-Use

PRODUCT DESCRIPTION: Insecticide

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS

The ORTHO Group P.O. Box 1749 Columbus, OH 43216

Emergency Phone: 1-800-225-2883

EPA REG. NO.: 1021-1582-239 PN: 7068

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical NameWt.%CAS#Esfenvalerate< 0.01</td>66230-04-4

Other Ingredients > 99.99

COMMENTS:

Product contains petroleum distillate. Ingredients not identified are proprietary or nonhazardous. Values are not product specifications.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: CAUSES SKIN IRRITATION AND MODERATE EYE IRRITATION
DO NOT GET ON SKIN, EYES OR CLOTHING
HARMFUL IF INHALED OR ABSORBED THROUGH SKIN
AVOID BREATHING VAPOR OR SPRAY MIST.
KEEP OUT OF REACH OF CHILDREN

POTENTIAL HEALTH EFFECTS

EYES: This product is moderately irritating to the eyes. Eye contact may include discomfort, tearing, swelling redness, and blurred vision. See Toxicology Information, Section 11.

SKIN: This product causes skin irritation. This product is harmful to internal organs if absorbed through the skin. The degree of injury will depend on the duration of exposure and amount absorbed. See Toxicological Information, Section 11.

INGESTION: This substance is slightly toxic to internal organs if swallowed. This product contains a petroleum distillate. Because of the low viscosity of the petroleum distillate, it can directly enter or be aspirated into the lungs either during swallowing or vomiting the substance. Once in the lungs, the substance is very difficult to remove and can cause severe injury to the lungs and death. See Toxicology Information, section 11.

INHALATION: This substance is harmful to internal organs if inhaled. The degree of injury will depend on the airborne concentration and duration of exposure. This substance may be irritating if inhaled. See Toxicology Information, section 11.

COMMENTS HEALTH: This product contains esfenvalerate, a cyano-pyrethroid that has the potential to cause temporary dermal paresthesis, e.g. burning, tingling, stinging sensations, that may occur following overexposure. However, using spray dilutions as indicated on the product label, it is unlikely that skin exposure to the spray mist will deliver sufficient concentrations of the active ingredient to trigger the dermal symptoms.

4. FIRST AID MEASURES

EYES: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.

SKIN: If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

INGESTION: If swallowed, call a poison control center or doctor immediately for treatment advice. Have person sip glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Never give anything by mouth to an unconscious person.

INHALATION: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTES TO PHYSICIAN: Note to Physician: The product contains a significant amount of petroleum distillate, therefore ingestion of this material or subsequent vomiting can result in aspiration which can cause chemical pneumonitis. The product also contains a cyano-pyrethroid that has been associated with transient dermal paresthesias in cases of extensive skin contact.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: >200°F TAG CC

FLAMMABLE CLASS: NOT classified as flammable or combustible.

EXTINGUISHING MEDIA: Water Spray, dry chemical, CO2.

HAZARDOUS COMBUSTION PRODUCTS: Thermal decomposition may produce carbon dioxide, carbon monoxide, and hydrogen cyanide.

FIRE FIGHTING PROCEDURES: Treat as an oil fire. Use a full-faced self-contained breathing apparatus along with full protective gear. Keep nearby containers and equipment cool with a water spray. Contain the run-off, if possible, for proper disposal.

HAZARDOUS DECOMPOSITION PRODUCTS: Exposure to temperatures above 160 F/71.1 C or exposure to alkaline substances (bases) may cause Esfenvalerate to decompose and Hydrogen Cyanide gas release.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: While wearing rubber gloves, soak up spilled material with paper towels and discard in trash.

LARGE SPILL: Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgite, bentonite or other absorbent clays. Collect contaminated absorbent, place in plastic-lined metal drum and dispose of in accordance with instructions provided under Section 13. "DISPOSAL". Thoroughly scrub floor or other impervious surface with a strong industrial type detergent solution and rinse with water.

For liquid spills that soak into the ground, contact the applicable Federal, State and or County Health Dept. for disposal recommendations. If disposal is required then refer to Section 13 "DISPOSAL" for instructions.

Leaking containers should be separated from non-leakers and either the container or its contents transferred to a drum or other non-leaking container and disposed of in accordance with instructions provided under Section 13 "Disposal". Any recovered spilled liquid should be similarly collected and disposed of.

Do not contaminate water, foodstuffs or feed by storage or disposal.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Read and observe all precautions on product label. Store unused product in original container only, in cool, dry area out of reach of children and animals. Do not store in areas where temperatures frequently exceed 100 degrees F.

HANDLING: Read and observe all precautions and instructions on the label. For handling large quantities of material, wear chemically impervious gloves such as neoprene or nitrile. Wear OSHA-approved safety glasses with side shields, goggles, or face shield. Mechanical ventilation should be used when handling this product in enclosed spaces. Use in well ventilated areas. Respirator protection is not normally required when handling this product, however it is recommended in the presence of vapors or mists of this product in the absence of good mechanical ventilation. Do not contaminate water, feed, or food by storage, handling, or disposal.

STORAGE: Read and observe storage instructions on the label. Store containers upright and closed. Store in a cool, dry, and well-ventilated place. Keep away from heat, ignition sources, and strong acids, bases, and oxidizers. Emptied containers may retain product residue. KEEP AWAY FROM CHILDREN.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Product is recommended for outdoor use only - use this product only in well ventilated areas. Read and observe label instructions. Mechanical ventilation should be used when handling this product in enclosed spaces.

PERSONAL PROTECTION

EYES AND FACE: Do not get this material in your eyes. Eye contact can be avoided by wearing chemical goggles.

SKIN: No special skin protection is usually necessary. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing protective clothing. Wash throughly with soap and water after handling.

RESPIRATORY: No special respiratory protection is normally required.

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

EXPOSURE LIMITS

Chemical Name OSHA PEL ACGIH TLV ACGIH STEL

Esfenvalerate None None None

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Odorless

APPEARANCE: Milky opaque white liquid.

pH: 6.0

PERCENT VOLATILE: Less than 1%

BOILING POINT: Not Established

FREEZING POINT: -20°F -4°C

SOLUBILITY IN WATER: Miscible with water.

SPECIFIC GRAVITY: 1.001 at 20°C

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID: Avoid contact with strong oxidizers, acids, and bases.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: (rabbits) >2,000 mg/kg body weight.

ORAL LD₅₀: (rat) >5,000 mg/kg body weight.

INHALATION LC₅₀: (rats) - 4-hour inhalation exposure: = 4.84 mg/L.

SENSITIZATION: Guinea pig - negative

CARCINOGENICITY:

CARCINOGENICITY COMMENTS: Results of rat and mouse lifetime feeding studies did not demonstrate any evidence that fenvalerate (esfenvalerate major isomer) was associated with carcinogenic activity. The results of the rat and mouse chronic feeding studies indicated the NOELs (no observable effect levels) were 12.5 and 15 mg/kg/day, respectively. Based on the results of the investigations, EPA has classed fenvalerate in carcingenicity class E (no evidence of carcinogenicity in either rats or mice). In addition, the chemical is not considered to be a carcinogen by IARC, NTP, OSHA or ACGIH.

TERATOGENICITY: Esfenvalerate is not considered to be a teratogen. Results of the rat and rabbit teratology investigations indicated that the NOEL's for maternal and developmental toxicity in both species were 2.0 and 20 mg/kg/dy (highest dose tested), respectively.

REPRODUCTIVE TOXIN: Results of the esfenvalerate 2-generation reproduction study demonstrated that the chemical was not associated with any adverse reproduction effects. The NOEL was 3.75 mg/kg/dy.

MUTAGENICITY: Based on the results of both in vivo and in vitro mutagenesis testing, esfenvalerate is not considered to be a mutagen.

GENERAL COMMENTS: Paresthesias: Esfenvalerate is a cyano-pyrethroid insecticide that has been associated with skin paresthesia in cases of extensive overexposure. The paresthesia symptoms are transient and consistent of tingling, burning, stinging sensations at the site of contact. The intensity of the sensory effect depends upon the extent of overexposure, individual skin sensitivity and environmental factors, e.g. hot, cold, pressure, etc. Clinically, the cutaneous sensations may be delayed a few hours, peak around 8-12 hours and remit within a few days. The sensations are usually not accompanied by a visible irritation or rash.

COMMENTS: Acute toxicity data above is from a similar formula containing 0.425% Esfenvalerate.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: This pesticide is toxic to fish and other wildlife. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when cleaning equipment or when disposing of equipment washwaters. Apply product only as specified on the label.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Do not reuse container. Securely wrap partially filled or empty container in several layers of newspaper and put in trash.

FOR LARGE SPILLS: Material collected that cannot be reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state, or local procedures.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not DOT regulated

SPECIAL SHIPPING NOTES: The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA
ACUTE: YES FIRE: NO REACTIVITY: NO PRESSURE GENERATING: NO

313 REPORTABLE INGREDIENTS: No SARA 313 reportable ingredients.

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: There are no SARA Title III Section 302 extremely hazardous substances present in this formulation (40 CFR 355).

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: No components in this product are subject to emergency requirements under CERCLA Section 103(a)(40 CFR 302.4)

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All non FIFRA regulated components are on the US EPA's TSCA Inventory List.

RCRA STATUS: No ingredients in this product appear on the RCRA lists (40 CFR 261.24, 40 CFR 251.33).

16. OTHER INFORMATION

NFPA CODES

FIRE: 0 HEALTH: 1 REACTIVITY: 1

APPROVAL DATE: 08/08/2001

REVISION SUMMARY New MSDS

COMMENTS: Use of this product is regulated by the U.S. Environmental Protection Agency (EPA) through the approved product label. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

MANUFACTURER DISCLAIMER: The information contained herein is, to the best of the Manufacturer's (see Section 1) knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and the Manufacturer shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, the Manufacturer shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.